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10/693,231	10/23/2003	Tomokazu Kake	81659 [SC-70004US]	1421

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EXAMINER
BROOME, SAID A

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,231	KAKE ET AL.	
	Examiner	Art Unit	
	Said Broome	2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,17,22 and 24-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14, 17, 22 and 24-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to an amendment filed 1/5/2006.

2. Claims 15, 16, 18-21 and 23 have been cancelled by the applicant.

3. Claims 17, 22, 24-26, 28, 30, 32, 34, 36, 37 and 40-42 have been amended by the applicant.

4. Claims 1-14, 27, 29, 31, 33, 35, 38 and 39 are original.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-10, 13, 14, 29 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldberg et al. (US Patent 5,963,203).

Goldberg et al. teaches what is disclosed in claims 1, 4 and 40 in column 4 lines 45-65 where it is described that moving pictures are represented as two-dimensional images that vary along a time axis in a virtual manner as a box space(column 10 lines 4-20), cutting the box space by a surface that contains a plurality of points(column 1 lines 29-32) each of which differs from the other in time, projecting the image that appears on the cut surface onto a plane in the direction of a time axis, and outputting the images appearing on the plane as new moving pictures by varying the cut surface in time(column 4 lines 59-65). Regarding claim 4, Goldberg et al. also teaches an image memory which sequentially stores the original moving pictures along

a time axis in column 9 lines 51-56, as well as an image conversion unit, or central processing unit, that processes the moving pictures as two-dimensional images that vary along a time axis in a virtual manner as a box space and also serves as an image data output unit that sets the displayed frames in column 9 lines 58-67. Goldberg et al. also describes what is disclosed in the preamble of claims 1, 4 and 40 which includes an image generating method in column 13 lines 34-65 also illustrated in Figure10, an image generating apparatus as described in column 9 lines 36-50 also illustrated in Figure 2, a program executable by a computer as described in column 9 lines 51-56 also illustrated in Figure 2 as element 11, and a recording medium which stores a program executable by a computer in column 9 lines 45-50 which is also illustrated in figure 2 as element 7.

Goldberg et al. describes the limitations of claims 2 and 5 in column 10 lines 8-20, where a cut surface in time is realized by moving the surface along the time axis is described, and is also illustrated in Figure 4.

Goldberg et al. describes the limitations of claims 3 and 7 in column 11 lines 53-62, where the surface is described to be defined by a function of coordinates of points contained in the two-dimensional image. Goldberg et al. also illustrates what is disclosed in claim 3 in Figure 7A.

Goldberg et al. describes the limitation of claim 8 in column 11 lines 58-62 where a surface is defined by the coordinate location that comprises the pixels of an image region and does not depend on the horizontal coordinate, or scanning line, of the two-dimensional image.

Goldberg et al. describes the limitation of claim 9 in column 11 lines 53-62 where the image conversion unit(column 9 lines 58-64) cuts the box space by a surface that is defined by a

function of attribute values, which are values that determine the contents of a display for each pixel, for an image region constituting the two-dimensional image. Goldberg et al. also describes the selection of a particular object within the image frame using coordinates to designate certain pixels within the image region to be cut and displayed as shown in Figure 6B.

Goldberg et al. describes the limitation of claim 10 in column 9 lines 44-45 where a setting input unit is described, and it is also illustrated in Figure 2 as elements 4 and 5. Goldberg et al. also describes the limitations of claim 10 in column 7 lines 20-31 where via a user operation a setting value is used to define the surface where the image conversion unit cuts the box space by the surface defined by a function of the setting value acquired by the setting input unit, as illustrated in Figure 6B.

Goldberg et al. describes the limitation of claim 13 in column 6 lines 34-43 where the rate of the moving picture is partially changed by the image conversion unit(column 9 lines 58-64) to be outputted from the image data put unit in a manner such that according to attribute values, which are values that determine the contents of a display for each pixel, of image regions that constitute the two-dimensional image surfaces vary in time with a different speed for each of the image regions as designated by the user.

Goldberg et al. also describes the limitation of claim 14 in column 4 lines 51-57 where it is described that a time value, or z value, is used to designate the time separation between the frames and would therefore correspond to the current frame as a present frame and the preceding and succeeding frames to include time values of past and future respectively.

Goldberg et al. describes what is disclosed in claim 29 in column 16 lines 33-41 where an attribute value, which is a value that designates the pixel position of the region of interest and is

inherently utilized to select the region of interest, is described as a value that indicates the order of approximation, or an estimation that determines whether the object of interest is present in respect to a desired image pattern, which is determined by using known pattern matching techniques.

Claims 17, 22, 34, 36 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US Patent 6,665,342).

Regarding claims 17 and 42, Brown describes reading out for each in-picture position of an image contained in a target frame, as illustrated in Figure 4 as elements 320A and 320B, as data that corresponds to the in-picture position from at least one of a plurality of frames contained in the original moving pictures in column 5 lines 12-15 and 25-35. Brown et al. also describes synthesizing the data in column 5 lines 32-35, where the image is updated with all the digital data from the still image frames. Brown et al. also describes the formation of new moving pictures by sequentially outputting frames formed by synthesizing in column 4 lines 10-14 where it is described that the plurality of video image frames are synthesized into an image that shows the progression of movement throughout the frames, which also allows new moving pictures to be output from the synthesized frames formed from this process. Brown et al. describes what is disclosed in claim 17 in column 5 lines 25-35 where the synthesizing of the image frames is done by a ratio, or a proportional difference between each image frame as stored in the segmentation mask, in respect to an attribute value of the image contained in one of the plurality of frames.

Regarding claim 22, Brown et al. also describes the image memory in column 4 line 8, and is also illustrated in Figure 1 as element 130, and recording for each frame, in column 4 lines 2-6, and is also illustrated in Figure 1 as element 105. Brown describes reading out for each in-picture position of an image contained in a target frame, as illustrated in Figure 4 as elements 320A and 320B, as data that corresponds to the in-picture position from at least one of a plurality of frames contained in the original moving pictures in column 5 lines 12-15 and 25-35. Brown et al. also describes synthesizing the data in column 5 lines 32-35, where the image is updated with all the digital data from the still image frames, which are record in the image memory described in column 4 line 8. Brown et al. also describes the formation of new moving pictures by sequentially outputting frames formed by synthesizing in column 4 lines 10-14 where it is described that the plurality of video image frames are synthesized into an image that shows the progression of movement throughout the frames, which also allows new moving pictures to be output from the synthesized frames formed from this process. Brown et al. describes what is disclosed in claim 17 in column 5 lines 25-35 where the synthesizing of the image frames is done by a ratio, or a proportional difference between each image frame as stored in the segmentation mask, in respect to an attribute value of the image contained in one of the plurality of frames.

Brown et al. describes what is disclosed in claim 34 in column 5 lines 58-61 where it is described that the attribute value is a value computed for each pixel.

Brown et al. also describes what is disclosed in claim 36 in column 4 lines 2-6, where it is described that a image input unit(element 140 of Figure 1) acquires images shot by a camera(element 120 of Figure 1) and sends the images to an image memory(element 130 of Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Brown et al. (US Patent 6,665,342).

Goldberg et al. teaches what is disclosed in claim 6 except for the definition of the surface in a manner such that the surface has continuous width in the direction of the time axis and the image conversion unit synthesizes images within the width. Brown et al. shows the surface of the frames having a continuous width in Figure 2. Brown et al. also teaches the image conversion unit(column 9 lines 58-64) synthesizes the two-dimensional images that are shown to be defined within a constant width in Figure 2, is described in column 3 lines 61-64. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown et al. because this combination would produce a surface that is defined in a manner such that all the image frames are continuously and consistently synthesized within the same width so as so avoid distortion of the synthesized image frame/s.

Goldberg et al. teaches what is disclosed in claim 33 except that the attribute value is a pixel value. Brown et al. teaches what is disclosed in claim 33 in column 5 lines 58-61 where it is described that the attribute value is a value computed for each pixel. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown

et al. because this combination would provide an attribute value that would be utilized to determine particular pixels within an image region be displayed at certain time intervals.

Goldberg et al. teaches what is disclosed in claim 35 except that an image input unit acquires original moving pictures shot by a camera and then sends the images to an image memory. Brown et al. teaches what is disclosed in claim 35 in column 4 lines 2-6, where it is described that a image input unit(element 140 of Figure 1) acquires images shot by a camera(element 120 of Figure 1) and sends the images to an image memory(element 130 of Figure 1). It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown et al. because this combination would provide an input of several moving image frames that are saved in memory for later division into image frame surface within a virtual box space in respect to a time axis.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Kaneko et al. (US Patent 6,940, 997).

Regarding claims 11 and 12, Goldberg et al. teaches all the limitations of the claims including a display screen(element 3 of Figure 2) and an input unit(column 9 lines 44-45). However, Goldberg et al. fails to teach the curve that indicates the relationship between coordinates of points contained in the two-dimensional images and time values. Kaneko teaches a relationship between the coordinates of points contained in the two-dimensional images and time values in column 12 lines 20-28, and is also illustrated on a graph represented by a curve in Figure 2C. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Kaneko et al. because this combinations would provide a visual

relationship between the two-dimensional coordinate points and time values that would be modified by a user to enable the ability to adjust the generated curve.

Claims 24, 25, 30, 32, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Goldberg et al. (US Patent 5,963,203).

Brown et al. teaches the limitations of the independent claims 15 and 18, but fails to teach the limitations of the dependent claims 24, 25, 30, 32, 37 and 39.

Goldberg et al. teaches what is disclosed in claim 24 in column 4 lines 51-57 where it is described that a time value, or z value, is used to designate time separation between the image frames. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide time intervals for each in-picture position, which enables the separation of particular image frames along a time axis.

Regarding claim 25, Brown fails to teach that the target frame or the at least one of frames is at least one of a previous frame in time or a subsequent frame in time with respect to a reference frame which should have been naturally outputted by said image data output from said image memory. Brown describes reading out for each in-picture position of an image contained in a target frame, as illustrated in Figure 4 as elements 320A and 320B, as data that corresponds to the in-picture position from at least one of a plurality of frames contained in the original moving pictures in column 5 lines 12-15 and 25-35. Brown et al. also describes synthesizing the image data in column 5 lines 32-35, where the image is updated with all the digital data from the

still image frames. Again, Brown et al. fails to teach the target frame or the at least one of frames is at least one of a previous frame in time or a subsequent frame in time with respect to a reference frame which should have been naturally outputted by said image data output from said image memory. Goldberg et al. teaches what is disclosed in claim 25 in column 10 lines 4-20 where the target frame, or at least one of the frames, is a previous frame or another frame in time with respect to a reference frame which should have been naturally outputted by image data output unit from the image memory(column 9 lines 51-56), and is also described in column 10 lines 35-41 where Goldberg et al. states that the frames may be selected at certain time intervals and are spaced at positions relative to another as illustrated in Figure 5A. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide the referencing of frames at particular time intervals that would enable the natural display of image frames in succession, as well as allow previous frames along the time axis to be accessed as the target frame of interest.

Goldberg et al. describes what is disclosed in claim 30 in column 16 lines 33-41 where an attribute value, which is a value that designates the pixel position of the region of interest and is inherently utilized to select the region of interest, is described as a value that indicates the order of approximation, or an estimation that determines whether the object of interest is present, relative to a desired image pattern, which is determined by using known pattern matching techniques. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide a desired image pattern to be acquired within a certain margin of error, thereby improving the chances of locating the object of interest within an mage region.

Goldberg et al. also describes the limitation of claim 37 in column 10 lines 21-34 where a setting input unit(column 9 lines 44-45) is described to set a value that is used to select a particular frame. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide the selection of one of the image frames at the request of user input.

Goldberg et al. describes what is disclosed in claim 39 in column 11 lines 53-55 where a setting input unit(column 9 lines 44-45) acquires, as a setting value, coordinates of characteristic points in the two-dimensional images. Goldberg et al. also describes that the image conversion unit(column 9 lines 58-64), which is understood to perform all processing, determines the at least one of the frames according to the coordinates of the characteristic points in column 11 lines 58-67 and column 12 lines 1-3. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide data that corresponds to an in-picture position that enables selection of a region of interest of one or a plurality of frames at the coordinate values input by the user.

Claims 26, 28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Itoh et al. (US Patent 5,926,186).

Brown et al. teaches what is disclosed in claim 26 except for the each in-picture position of the images contained in the target frame, a predetermined pixel value is provided. Brown describes reading out for each in-picture position of an image contained in a target frame, as illustrated in Figure 4 as elements 320A and 320B, as data that corresponds to the in-picture position from at least one of a plurality of frames contained in the original moving pictures in

column 5 lines 12-15 and 25-35. Brown et al. also describes synthesizing the image data in column 5 lines 32-35, where the image is updated with all the digital data from the still image frames. Again, Brown et al. fails to teach for the each in-picture position of the images contained in the target frame, a predetermined pixel value is provided. Itoh et al. teaches the image conversion unit add, or provide, a predetermined pixel value in accordance with an attribute value for each in-picture position of the images contained in the target image in column 14 lines 34-40, where the pixel value is a position of a point(element 40 of Figure 5A) or picture element that comprises the image, or pixel, that is found at the in-picture position, which is also illustrated as graphic 26 of Figure 5A.

Brown et al. teaches what is disclosed in claim 28 except that an attribute value is a depth value. Itoh et al. teaches the limitation of claim 28 in column 20 lines 35-40 where it is described that the attribute value is a value designating time, which is equivalent to a value designating depth or a value along a z axis. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Itoh et al. because this combination would provide a predetermined pixel value that is used to designate in-picture positions, or image regions of interest, from which to display certain features of movement and change generated images at certain time intervals.

Brown et al. teaches what is disclosed in claim 32 except that an attribute value is a value that indicates a degree of change of an image area in time. Itoh et al. teaches the limitation of claim 31 in column 20 lines 35-40 where it is described that an attribute value represents the passage of time. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Itoh et al. because this combination would provide a value that

represents the degree of change in time for each image frame surface which would enable the distinction of movement of pixel within an image region from frame to frame in respect to time.

Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Itoh et al. (US Patent 5,926,186).

Goldberg et al. teaches what is disclosed in claim 27 except that an attribute value is a depth value. Itoh et al. teaches the limitation of claim 27 in column 20 lines 35-40 where it is described that the attribute value is a value designating time, which is equivalent to a value designating depth or a value along a z axis. The motivation for combining the teachings of Goldberg et al. with Itoh et al. is the same as the motivation stated above for claim 28.

Goldberg et al. teaches what is disclosed in claim 31 except that an attribute value is a value that indicates a degree of change of an image area in time. Itoh et al. teaches the limitation of claim 31 in column 20 lines 35-40 where it is described that an attribute value represents the passage of time. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Itoh et al. because this combination would provide a value that represents the degree of change in time for each image frame surface which would enable the distinction of movement of pixel within an image region from frame to frame in respect to time.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Itoh et al. in further view of Kaneko et al. (US Patent 6,940, 997).

Brown et al. and Itoh et al. teach what is disclosed in claim 38 except a curve that indicates the relationship between coordinates of points contained in the two-dimensional images

and time values. Kaneko teaches a relationship between the coordinates of points contained in the two-dimensional images and time values in column 12 lines 20-28, and is also illustrated on a graph represented by a curve in Figure 2C. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. and Itoth et al. with Kaneko et al. because this combinations would provide a visual relationship between the two-dimensional coordinate points and time values that would be modified by a user to enable the ability to adjust the generated curve.

Response to Arguments

Applicant's arguments filed 1/5/2006 have been fully considered but they are not persuasive.

The applicant argues that the reference Goldberg et al. used in the 35 U.S.C. 102(b) rejection of claims 1-5, 7-10, 13, 14, 29 and 40 does not teach a surface that cuts a cuboid along a time axis and images that appear on the surface. The examiner maintains the rejection because Goldberg et al. teaches separated or "cracked open" images displayed in a cuboid, in column 6 lines 62-67 and column 7 lines 1-3, and outputting the images on surfaces along a time axis, as described in column 10 lines 5-8, 13-20("...the z axis of the cuboid corresponds to the time axis. Thus, in the theoretical construct cuboid, the selected frames are spaced apart in the z direction in accordance with their respective time separations..."), and is also shown in Figure 4 where images are displayed on the surfaces of the dissected cuboid.

The applicant also argues that the reference Brown et al. used in the 35 U.S.C. 102(e) rejection of claims 15, 17, 18, 21, 22, 34, 36, 41 and 42 does not teach synthesizing in a ratio

according to an attribute value. The examiner maintains the rejection because Brown et al. teaches comparing the proportional difference value between each pixel contained in two sequential frames in order to generate an attribute difference value from each pixel from both frames, in column 5 lines 58-61("The attribute difference is typically computed as a pixel by pixel comparison of the corresponding attribute value in the two frames 315A and 315B that are currently in the pipeline 310."). If a change exceeds a certain threshold, then that value is used to determine whether the resulting synthesized or composited image is affected, as described in column 7 lines 47-58("...we iteratively 520 sample two still frames from the ordered sequence...we compute the attribute difference DIFF(t.sub.1,t.sub.2) 530 for each pair of point-wise pixels (i,j) in the two frames...If this difference exceeds the change detection 540 threshold T and the segmentation mask SM 550 is not yet set, we update the segmentation mask 550 and the strobe photo SP 555 with the most recent pixel information.").

The applicant also acknowledges that the cited references Brown et al. in view of Goldberg et al. used in the 35 U.S.C. 103(a) rejection of claim 25 fail to teach the target frame or the at least one of frames is at least one of a previous frame in time or a subsequent frame in time with respect to a reference frame which should have been naturally outputted by said image data output unit from said image memory. The examiner maintains the rejection because Goldberg et al. teaches that a subsequent frame along the time axis that is preceded by a previous frame is one that should come in succession and therefore follow that frame at the next time interval, as described in column 10 lines 13-20 ("...the z axis of the cuboid corresponds to the time axis...the selected frames are spaced apart in the z direction in accordance with their respective time separations.") and column 10 lines 42-47("...the placement positions of the basic frames

relative to one another..."), where Goldberg et al. states that the frames are set at certain time intervals and are spaced at successive positions relative to another as illustrated in Figure 5A.

The applicant also argues that the cited references used in the 35 U.S.C. 103(a) rejection of claim 26 fail to teach for each in-picture position of the images contained in the target frame, said image conversion unit adds a predetermined pixel value in accordance with an attribute value thereof. The examiner maintains the rejection because Brown et al. teaches designating a certain position in the frame, or in-picture position, in a target frame of interest by selecting the specific object, or attribute value, to designate the area for the indication of desired change using a designated color(column 6 lines 14-27("The attribute is chosen based on the criteria discussed above, such as information regarding sources of noise, types of motion, input color format...The sensitivity of the attribute difference is determined based on the type of attribute (intensity, color, color vector...The attribute sensitivity can be a...color threshold..."), which is analogous to adding a predetermined pixel value of desired change to a certain region determined to indicate a change in the frames, which are then displayed, as described in column 5 lines 54-56("...it is possible to exploit knowledge of the object, such as from a user specifying a region of interest representing the initial position of the object...") and column 8 lines 60-67("...user can measure positional data and the relative changes over the digital video stream in a single image...the user can accurately measure the absolute position of any point...").

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached Monday-Friday between 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Broome SB
3/17/06

ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER